ELSEVIER

Protein Structure and Molecular Enzymology

Vol. 1432, 1999

BIOCHIMICA ET BIOPHYSICA ACTA

BBA

www.elsevier.com/locate/bba

Cumulative Contents

Information for Contributors vii

Regular papers

Reexamination of the high mobility group-1 protein for self-association and characterization of hydrodynamic properties
W. Ranatunga, J. Lebowitz, B. Axe, P. Pavlik, S.R. Kar and W.M. Scovell (USA) 1

Characterisation of a family of *Schistosoma japonicum* proteins related to dynein light chains
W. Yang, M.K. Jones, J. Fan, S.R. Hughes-Stamm and D.P. McManus (Australia) 13

Phe-D-Leu-Phe-D-Leu-Phe derivatives as formylpeptide receptor antagonists in human neutrophils: cellular and conformational aspects
A. Dalpiaz, M.E. Ferretti, R. Pecoraro, E. Fabbri, S. Traniello, A. Scatturin and S. Spisani (Italy) 27

Rational design of a more stable yeast iso-1-cytochrome *c*
C.M. Lett, M.D. Rosu-Myles, H.E. Frey and J.G. Guillemette (Canada) 40

Incorporation of non-proteolytic proteins by murine α_2-macroglobulin
G. Bhattacharjee, H. Grøn and S.V. Pizzo (USA) 49

Bacillus thuringiensis insecticidal Cry1Aa toxin binds to a highly conserved region of aminopeptidase N in the host insect leading to its evolutionary success
K. Nakanishi, K. Yaoi, N. Shimada, T. Kadotani and R. Sato (Japan) 57

Structure study of osteostatin PTHrP[Thr107](107–139)
R.M. Cuthbertson, B.E. Kemp and J.A. Barden (Australia) 64

The affinity and kinetics of inhibition of cysteine proteinases by intact recombinant bovine cystatin C
S.-L. Olsson, B. Ek and I. Björk (Sweden) 73

Effect of ionic strength on the interfacial properties of cytochrome *c*
Z. Gažová, M. Antalík, J. Bágel'ová and Z. Tomori (Slovakia) 82

Determination of the site of disulfide linkage between heavy and light chains of silk fibroin produced by *Bombyx mori*
K. Tanaka, N. Kajiyama, K. Ishikura, S. Waga, A. Kikuchi, K. Ohtomo, T. Takagi and S. Mizuno (Japan) 92

Insecticidal activity of an α-amylase inhibitor-like protein resembling a putative precursor of α-amylase inhibitor in the common bean, *Phaseolus vulgaris* L.
M. Ishimoto, T. Yamada and A. Kaga (Japan) 104

Multi-enzyme kinetic analysis of glycolipid biosynthesis
E. Bieberich and R.K. Yu (USA) 113

OHIO-1 β-lactamase mutants: the $Arg^{244}Ser$ mutant and resistance to β-lactams and β-lactamase inhibitors
S. Lin, M. Thomas, S. Mark, V. Anderson and R.A. Bonomo (USA) 125

Short sequence-paper

Nucleotide sequences of genes for ribosomal protein L41 and $tRNA^{Thr}$(AGU) from *Coprinus cinereus*
T. Aimi, K. Tsugawa, T. Yano and T. Morinaga (Japan) 137

Information for Contributors vii

Reviews

Mechanisms for regulating electron transfer in multicentre redox proteins
R.E. Sharp and S.K. Chapman (UK, USA) 143

New insights into an old protein: the functional diversity of mammalian glyceraldehyde-3-phosphate dehydrogenase
M.A. Sirover (USA) 159

Regular papers

Study of the (*S*)-hydroxynitrile lyase from *Hevea brasiliensis*: mechanistic implications
U. Hanefeld, A.J.J. Straathof and J.J. Heijnen (The Netherlands) 185

Evidence of heterogeneous 1-anilinonaphthalene-8-sulfonate binding to β-lactoglobulin from fluorescence spectroscopy
L. D'Alfonso, M. Collini and G. Baldini (Italy) 194

Molecular oxygen oxidizes the porphyrin ring of the ferric α-hydroxyheme in heme oxygenase in the absence of reducing equivalent
C. Taiko Migita, H. Fujii, K. Mansfield Matera, S. Takahashi, H. Zhou and T. Yoshida (Japan, USA) 203

Adapting protein solubility by glycosylation.
J.W. Tams, J. Vind and K.G. Welinder (Denmark) 214

Conformational structure and binding mode of glyceraldehyde-3-phosphate dehydrogenase to tRNA studied by Raman and CD spectroscopy
P. Carmona, A. Rodríguez-Casado and M. Molina (Spain) 222

Bovine lens crystallins do contain helical structure: a circular dichroism study
M. Bloemendal, A. Toumadje and W.C. Johnson Jr. (Netherlands, USA) 234

Molecular docking studies on interaction of diverse retinol structures with human alcohol dehydrogenases predict a broad role in retinoid ligand synthesis
M.H. Foglio and G. Duester (USA) 239

Characterization of human acid sphingomyelinase purified from the media of overexpressing Chinese hamster ovary cells
X. He, S.R.P. Miranda, X. Xiong, A. Dagan, S. Gatt and E.H. Schuchman (Israel, USA) 251

Stability and binding properties of wild-type and c17s mutated human sterol carrier protein 2
C. Jatzke, H.-J. Hinz, U. Seedorf and G. Assmann (Germany) 265

Characterization of two members of a novel malic enzyme class
R.T. Voegele, M.J. Mitsch and T.M. Finan (Canada) 275

Formation of βA3/βB2-crystallin mixed complexes: involvement of N- and C-terminal extensions
P.J.L. Werten, R.A. Lindner, J.A. Carver and W.W. de Jong (Australia, Netherlands) 286

Biosensor measurement of the interaction kinetics between insulin-like growth factors and their binding proteins
M.-S. Wong, C.-C. Fong and M. Yang (Hong Kong) 293

Accelerated secretion of mutant β-lactoglobulin in *Saccharomyces cerevisiae* resulting from a single amino acid substitution
Y. Katakura, A. Ametani, M. Totsuka, S.-y. Nagafuchi and S. Kaminogawa (Japan) 302

Interactive binding to the two principal ligand binding sites of human serum albumin: effect of the neutral-to-base transition
K. Yamasaki, T. Maruyama, K. Yoshimoto, Y. Tsutsumi, R. Narazaki, A. Fukuhara, U. Kragh-Hansen and M. Otagiri (Denmark, Japan) 313

Structure and stability of recombinant protein depend on the extra N-terminal methionine residue: S6 permutein from direct and fusion expression systems
V.N. Uversky, Z.K. Abdullaev, A.S. Arseniev, E.V. Bocharov, D.A. Dolgikh, R.F. Latypov, T.N. Melnik, K.S. Vassilenko and M.P. Kirpichnikov (Russia, USA) 324

NMR study of the sites of human hemoglobin acetylated by aspirin
A.S.L. Xu, J.M. Macdonald, R.J. Labotka and R.E. London (USA) 333

Nucleotide-dependent bisANS binding to tubulin
S. Chakraborty, N. Sarkar and B. Bhattacharyya (India) 350

Ca^{2+} and Zn^{2+} binding properties of peptide substrates of vertebrate collagenase, MMP-1
N.N. Vettakkorumakankav and V.S. Ananthanarayanan (Canada) 356

Cloning, sequencing and further characterization of acylpeptide hydrolase from porcine intestinal mucosa
V. Raphel, T. Giardina, L. Guevel, J. Perrier, L. Dupuis, X.-J. Guo and A. Puigserver (France) 371

Purification and properties of major α-D-mannosidase in the luminal fluid of porcine epididymis
Y.-Z. Jin, F. Dacheux, J.-L. Dacheux, S. Bannai, Y. Sugita and N. Okamura (France, Japan) 382

Rapid reports

Crystallization and preliminary X-ray diffraction analysis of a myotoxic phospholipase A_2 homologue from *Bothrops neuwiedi pauloensis* venom
M.R.M. Fontes, A.M. Soares, V.M. Rodrigues, A.C. Fernandes, R.J. Da Silva and J.R. Giglio (Brazil) 393

Fluorimetric detection of enzymatic activity associated with the human tumor suppressor Fhit protein
A.C. Asensio, S. Oaknin and P. Rotllán (Spain) 396

Effect of redox state on unfolding energetics of heme proteins
P. Wittung-Stafshede (USA) 401

Short sequence-papers

Molecular cloning, functional expression and purification of a glucan branching enzyme from *Neisseria denitrificans*
V. Büttcher, M. Quanz and L. Willmitzer (Germany) 406

Nucleotide sequence, heterologous expression and novel purification of DNA ligase from *Bacillus stearothermophilus*
J.A. Brannigan, S.R. Ashford, A.J. Doherty, D.J. Timson and D.B. Wigley (UK) 413

Polymorphism and evolution of collagenolytic serine protease genes in crustaceans
D. Sellos and A. Van Wormhoudt (France) 419

Cumulative Contents, Vol. 1432 425

Author Index 428